UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/051,070	04/02/1998	STEPHEN CLIFFORD APPLEBY	36-1201	7570

7590   11/07/2002

NIXON & VANDERHYE
1100 NORTH GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201

EXAMINER
PHAN, THAI Q

ART UNIT	PAPER NUMBER
2123	

DATE MAILED: 11/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___3___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Aug. 21, 2002* _____.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16 and 20-30* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-16 and 20-30* _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

4) ☐ Interview Summary (PTO-413) Paper No(s). _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

DETAILED ACTION

This Office Action is responsive to applicant's response filed Aug. 21, 2002. Applicant's

argument in the Brief for reconsideration of the finality of the rejection of the last Office action is

persuasive and, therefore, the finality of that action is withdrawn. Claims 1-16, and 20-30 are

pending in this Office action

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2.   Claims 1-16 and 20-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et

al., patent no. 5,649,057.

As per claim 1, Lee anticipates method and system for speech language recognition

employing a key word training model and non-key word model with feature limitations very

identical to the claimed (Abstract and Summary of the Invention). According to Lee, the method

and system includes:

means for outputting message to a user (Figs. 1 and 7, col. 5, line 28 to col. 6, line 61, for

example),

means for receiving input from the user (Figs. 1 and 7, cols. 5-6)

means for analyzing lexical structure (col. 3, lines 39-56, col. 5, lines 1-16), means for

storing rules specifying grammatically allowable relationships of words input (Figs. 1, 7, cols. 5-

6, for example),

a central processor Figs. 1 and 7, cols. 5-7 for processing user dialogue, for example, of

the present patent which includes lexical rules or grammar to recognize and handle the

occurrence of words or spoken language through the input devices (col. 6, lines 5-14), contained

in the lexical rules the relationships specifying by rules in accordance with the data specified in

the transaction, key word objects or non-keyword objects, object attributes, etc. in the database of

the system, a transaction storage means for containing data relating to allowable transactions

between users interaction (Figs. 1 and 7) and independence upon recognition, to generate output

dialogue in the most recent or current to meet real time requirement or time duration relying on

constraints applied to the training model (Figs. 1 and 7, cols. 5-7) for recognizing dialogue

language (col. 6, lines 5 to col. 7, line 31),

and an output means for making output dialogue available for dialogue purpose (Figs. 1

and 7, cols. 5-7).

As per claim 2, Lee anticipates method and system for speech language recognition

employing a key word training model and non-key word model with feature limitations very

identical to the claimed (Abstract and Summary of the Invention). According to Lee, the method

and system includes: :

means for outputting message to a user (Figs. 1 and 7, col. 5, line 28 to col. 6, line 61, for

example),

means for receiving input from the user (Figs. 1 and 7, cols. 5-6)

means for analyzing lexical structure (col. 3, lines 39-56, col. 5, lines 1-16), means for

storing rules specifying grammatically allowable relationships of words input (Figs. 1, 7, cols. 5-

6, for example),

a central processor Figs. 1 and 7, cols. 5-7 for processing user dialogue, for example, of

the present patent which includes lexical rules or grammar to recognize and handle the

occurrence of words or spoken language through the input devices (col. 6, lines 5-14), contained

in the lexical rules the relationships specifying by rules in accordance with the data specified in

the transaction, key word objects or non-keyword objects, object attributes, etc. in the database of

the system, a transaction storage means for containing data relating to allowable transactions

between users interaction (Figs. 1 and 7) and independence upon recognition, to generate output

dialogue in the most recent or current to meet real time requirement or time duration relying on

constraints, and such constraints are applied and removed in appropriate manner to the training

model (Figs. 1 and 7, cols. 5-7) for recognizing dialogue language in an effective manner (col. 6,

lines 5 to col. 7, line 31),

and an output means for making output dialogue available for dialogue purpose (Figs. 1

and 7, cols. 5-7).

Claim 2 is thus rejected in like manner.

As per claim 3, Lee anticipates dialogue or spoken language grammar which would

include such as number, genders, etc.

As per claims 4-5, Lee discloses dialogue recognization (col. 3, General Description, col.

6, lines 5-14) based on such as semantic grammar rules, syntactic structures, lexicons, etc.

Which would include detect recognized errors as claimed

As per claim 6, Lee anticipates language training model for different target languages.

As per claims 7-11, Lee anticipates the system for use to recognize text, speech, voice,

other peripheral device inputs for user dialogue, etc.

As per claim 12, Lee anticipated interactively interface for user which would include

speech synthesizer as claimed for dialogue.

As per claims 13-15, Lee disclosed user interface (Figs. 1 and 7, cols. 5-7), including a

computer, display, input means and graphic user interface for interactive with speaking user .

As per claim 16, Lee disclosed communication channel in a recognition network

connected dialogue server remotely such as in central telecommunication system (Abstract).

As per claim 20, Lee dialogue recognition includes rules to recognize characters,

numbers, etc. as claimed.

As per claims 21-23, Lee anticipates lexical rules of syntax, grammars, etc. which would

include inflection rules as claimed.

As per claim 24, Lee anticipates method and system for speech language recognition

employing a key word training model and non-key word model with feature limitations very

identical to the claimed (Abstract and Summary of the Invention). According to Lee, the method

and system includes:

means for outputting message to a user (Figs. 1 and 7, col. 5, line 28 to col. 6, line 61, for example),

means for receiving input from the user (Figs. 1 and 7, cols. 5-6)

means for analyzing lexical structure (col. 3, lines 39-56, col. 5, lines 1-16), means for storing rules specifying grammatically allowable relationships of words input (Figs. 1, 7, cols. 5-6, for example),

a central processor Figs. 1 and 7, cols. 5-7 for processing user dialogue, for example, of the present patent which includes lexical rules or grammar to recognize and handle the occurrence of words or spoken language through the input devices (col. 6, lines 5-14), contained in the lexical rules the relationships specifying by rules in accordance with the data specified in the transaction, key word objects or non-keyword objects, object attributes, etc. in the database of the system, a transaction storage means for containing data relating to allowable transactions between users interaction (Figs. 1 and 7) and independence upon recognition, to generate output dialogue in the most recent or current to meet real time requirement relying on constraints applied to the training model (Figs. 1 and 7, cols. 5-7) for recognizing dialogue language (col. 6, lines 5 to col. 7, line 31),

and an output means for making output dialogue available for dialogue purpose (Figs. 1 and 7, cols. 5-7). Claim 24 is thus rejected in like manner.

As per claim 25, Lee anticipates dialog conversion rules including lexicon rules or constraint rules or relation, and Lee anticipates such rules or conversation constraints would be removed or relaxed to optimally train and effective process (col. 7, lines 10-27).

As per claims 26-27, Lee requires hardware such as a digital signal processing processor

as in the claims for performing such claimed limitations.

As per claims 28-29, Lee anticipates method and system for speech language recognition

employing a key word training model and non-key word model with feature limitations very

identical to the claimed (Abstract and Summary of the Invention). According to Lee, the method

and system includes:

means for outputting message to a user (Figs. 1 and 7, col. 5, line 28 to col. 6, line 61, for

example),

means for receiving input from the user (Figs. 1 and 7, cols. 5-6)

means for analyzing lexical structure (col. 3, lines 39-56, col. 5, lines 1-16), means for

storing rules specifying grammatically allowable relationships of words input (Figs. 1, 7, cols. 5-

6, for example),

a central processor Figs. 1 and 7, cols. 5-7 for processing user dialogue, for example, of

the present patent which includes lexical rules or grammar to recognize and handle the

occurrence of words or spoken language through the input devices (col. 6, lines 5-14), contained

in the lexical rules the relationships specifying by rules in accordance with the data specified in

the transaction, key word objects or non-keyword objects, object attributes, etc. in the database of

the system, a transaction storage means for containing data relating to allowable transactions

between users interaction (Figs. 1 and 7) and independence upon recognition, to generate output

dialogue in the most recent or current to meet real time requirement relying on constraints

applied to the training model (Figs. 1 and 7, cols. 5-7) for recognizing dialogue language (col. 6, lines 5 to col. 7, line 31),

and an output means for making output dialogue available for dialogue purpose (Figs. 1 and 7, cols. 5-7). Claims 28 and 29 are thus rejected in like manner.

As per claim 30, due to similarity of claim 30 to 2, and Lee additionally anticipates a plurality of lexical rules for known natural languages conversation or language dialogue, and relationships of these rules for conversation (col. 3, General Description, col. 6, lines 5-23, col. 7). Lee also anticipates constraint or dialogue relations relaxation for rule-based learning to reduce memory requirement (Summary of the Invention and col. 7, lines 10-27). Claim 30 is also rejected in like manner.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-16, and 20-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1.   US patent no. 5,696,962, issued to Kupiec, Julian, on Dec. 1997

2.   US patent no. 5,797,123, issued to Chou et al., Aug. 1998

3.   US patent no. 6,044,347, issued to Abella et al., on Mar. 2000

4.   Kawahara et al., "Key Phase Detection and Verification for Flexible Speech

Understanding," IEEE, 1996, pp. 861-864.

5.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Thai Phan whose telephone number is (703) 305-3812.

        Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703)305-3900.

        Any response to this action should be mailed to:

        Commissioner of Patents and Trademarks

        Washington, D.C. 20231

        or faxed to:

        (703) 746-7239, (for formal communications intended for entry)
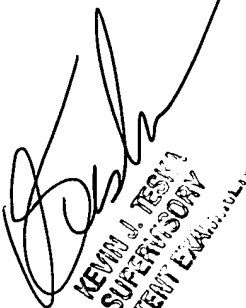
        Or:

        (703) 746-7240 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

        Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington. VA., Sixth Floor (Receptionist).

October 31, 2002